

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1. (original): An isolated essentially mammalian positive-sense single stranded RNA virus (EMCR-CoV) comprising the sequence of figure 1 or homologues thereof.

Claim 2. (original): An isolated positive-sense single stranded RNA virus (EMCR-CoV) belonging to the Coronaviruses and identifiable as phylogenetically corresponding thereto by determining a nucleic acid sequence of said virus and testing it in phylogenetic tree analyses wherein maximum likelihood trees are generated using 100 bootstraps and 3 jumbles and finding it to be more closely phylogenetically corresponding to a virus isolate having the sequences as depicted in figure 1 than it is corresponding to a virus isolate of PEDV (porcine epidemic diarrhea virus), HCoV-229E (human coronavirus 229E), PRCoV (porcine respiratory coronavirus), TGEV (transmissible gastroenteritis virus), CaCoV (Canine coronavirus) and FeCoV (feline coronavirus).

Claim 3. (currently amended): A virus according to claim 1 ~~or 2~~ wherein said nucleic acid sequence comprises an open reading frame (ORF) encoding a viral protein of said virus.

Claim 4. (original): A virus according to claim 3 wherein said open reading frame is selected from the group of ORFs encoding the viral replicase, nuclear capsid protein, matrix protein and the spike protein.

Claim 5. (currently amended): A virus according to claim 1 ~~4~~ isolatable from a human with atypical pneumonia.

Claim 6. (currently amended): An isolated or recombinant nucleic acid or EMCR-CoV virus-specific functional fragment thereof obtainable from a virus according to claim 1 ~~anyone of claims 1 to 5~~.

Claim 7. (original): A vector comprising a nucleic acid according to claim 6.

Claim 8. (currently amended): A host cell comprising a nucleic acid according to claim 6 ~~or a vector according to claim 7.~~

Claim 9. (original): An isolated or recombinant proteinaceous molecule or EMCR-CoV virus-specific functional fragment thereof encoded by a nucleic acid according to claim 6.

Claim 10. (original): An antigen comprising a proteinaceous molecule or EMCR-CoV virus-specific functional fragment thereof according to claim 9.

Claim 11. (original): An antibody specifically directed against an antigen according to claim 10.

Claim 12. (original): A method for identifying a viral isolate as an EMCR-CoV virus comprising reacting said viral isolate or a component thereof with an antibody according to claim 11.

Claim 13. (original): A method for identifying a viral isolate as an EMCR-CoV virus comprising reacting said viral isolate or a component thereof with a nucleic acid according to claim 6.

Claim 14. (currently amended): A method for virologically diagnosing an EMCR-CoV infection of a mammal comprising determining in a sample of said mammal the presence of a viral isolate or component thereof by reacting said sample with a nucleic acid according to claim 6 ~~or an antibody according to claim 11.~~

Claim 15. (currently amended): A method for serologically diagnosing an EMCR-CoV infection of a mammal comprising determining in a sample of said mammal the presence of an antibody specifically directed against an EMCR-CoV virus or component thereof by reacting said sample with a proteinaceous molecule or fragment thereof according to claim 9 ~~or an antigen according to claim 10.~~

Claim 16. (currently amended): A diagnostic kit for diagnosing an EMCR-CoV infection comprising a virus according to claim 1 ~~any one of claims 1 to 5, a nucleic acid according to claim 6, a proteinaceous molecule or fragment thereof according to claim 9, an antigen according to claim 10 and/or an antibody according to claim 11.~~

Claim 17. (currently amended): Use of a virus according to claim 1 ~~any one claims 1 to 5, a nucleic acid according to claim 6, a vector according to claim 7, a host cell according to claim 8, a proteinaceous molecule or fragment thereof according to claim 9, an antigen according to claim 10, or an antibody according to claim 11~~ for the production of a pharmaceutical composition.

Claim 18. (original): Use according to claim 17 for the production of a pharmaceutical composition for the treatment or prevention of an EMCR-CoV virus infection.

Claim 19. (currently amended): Use according to claim 17 ~~or 18~~ for the production of a pharmaceutical composition for the treatment or prevention of atypical pneumonia.

Claim 20. (currently amended): A pharmaceutical composition comprising a virus according to claim 1 ~~any one of claims 1 to 5, a nucleic acid according to claim 6, a vector according to claim 7, a host cell according to claim 8, a proteinaceous molecule or fragment thereof according to claim 9, an antigen according to claim 10, or an antibody according to claim 11.~~

Claim 21. (original): A method for the treatment or prevention of an EMCR-CoV virus infection comprising providing an individual with a pharmaceutical composition according to claim 20.

Claim 22. (original): A method for the treatment or prevention of atypical pneumonia comprising providing an individual with a pharmaceutical composition according to claim 20.

Claim 23. (original): A viral replicase encoded by an RNA sequence comprising the indicated sequences, or homologues thereof as depicted in figure 1.

Claim 24. (original): A viral spike protein comprising the indicated amino acid sequence as depicted in figure 1, or a homologue thereof.

Claim 25 (original): A viral nuclear capsid protein encoded by an RNA sequence comprising the indicated sequence as depicted in figure 1 or a homologue thereof.

Claim 26. (original): A viral nsp 3 or envelope protein encoded by an RNA sequence comprising the indicated sequence as depicted in figure 1, or a homologue thereof.

Claim 27. (currently amended): A nucleic acid sequence which comprises one or more of the sequences coding for separate ~~seperate~~ viral proteins as depicted in figure 1 or a nucleic acid sequence which can hybridise with any of these sequences under stringent conditions.

Claim 28. (new): A host cell comprising a vector according to claim 7.

Claim 29. (new): A method for virologically diagnosing an EMCR-CoV infection of a mammal comprising determining in a sample of said mammal the presence of a viral isolate or component thereof by reacting said sample with an antibody according to claim 11.

Claim 30. (new): A method for serologically diagnosing an EMCR-CoV infection of a mammal comprising determining in a sample of said mammal the presence of an antibody specifically directed against an EMCR-CoV virus or component thereof by reacting said sample with an antigen according to claim 10.

Claim 31. (new): A diagnostic kit for diagnosing an EMCR-CoV infection comprising a nucleic acid according to claim 6.

Claim 32. (new): A diagnostic kit for diagnosing an EMCR-CoV infection comprising a proteinaceous molecule or fragment thereof according to claim 9.

Claim 33. (new): A diagnostic kit for diagnosing an EMCR-CoV infection comprising an antigen according to claim 10.

Claim 34. (new): A diagnostic kit for diagnosing an EMCR-CoV infection comprising an antibody according to claim 11.

Claim 35. (new): Use of a nucleic acid according to claim 6 for the production of a pharmaceutical composition.

Claim 36. (new): Use of a vector according to claim 7 for the production of a pharmaceutical composition.

Claim 37. (new): Use of a host cell according to claim 8 for the production of a pharmaceutical composition.

Claim 38. (new): Use of a proteinaceous molecule or fragment thereof according to claim 9 for the production of a pharmaceutical composition.

Claim 39. (new): Use of an antigen according to claim 10 for the production of a pharmaceutical composition.

Claim 40. (new): Use of an antibody according to claim 11 for the production of a pharmaceutical composition.

Claim 41. (new): A pharmaceutical composition comprising a nucleic acid according to claim 6.

Claim 42. (new): A pharmaceutical composition comprising a vector according to claim 7.

Claim 43. (new): A pharmaceutical composition comprising a host cell according to claim 8.

Claim 44. (new): A pharmaceutical composition comprising a proteinaceous molecule or fragment thereof according to claim 9.

Claim 45. (new): A pharmaceutical composition comprising an antigen according to claim 10.

Claim 46. (new): A pharmaceutical composition comprising an antibody according to claim 11.